

Title (en)
Ion pumping of a microtip flat screen

Title (de)
Ionenpumpen eines flachen Mikrospitzen-Schirms

Title (fr)
Pompage ionique d'un écran plat à micropointes

Publication
EP 0893817 A1 19990127 (FR)

Application
EP 98410073 A 19980626

Priority
FR 9708363 A 19970627

Abstract (en)
The screen includes a cathode (1) with electron emitting points (2) and a grating (3) with holes (4) corresponding to the emitting points. The cathode is placed opposite an anode with photoluminescent surface on a glass substrate (6). The emitting points are deposited along conductors (7) which are organised in columns. The grating has rows normal to the direction of the columns. An insulating layer is provided between the grating and the cathode. A vacuumed space (11) is provided between the anode and the cathode which are separated by spacers. An electronic circuit (12) controls the cathode and the anode,

Abstract (fr)
L'invention concerne un écran plat à micropointes comportant une cathode (1) pourvue de zones actives de micropointes (2) d'émission électronique ; une anode (5) cathodoluminescente pourvue, au moins en regard desdites zones actives de micropointes, de zones actives d'éléments luminophores (16) ; une grille principale (3) d'extraction d'électrons émis par les micropointes actives (2) en direction des éléments luminophores (16) ; et, côté cathode (1), au moins une zone sacrificielle de micropointes (2') propre à être adressée, hors de périodes de fonctionnement de l'écran et indépendamment desdites zones actives. <IMAGE>

IPC 1-7
H01J 41/18; **H01J 29/94**; **H01J 31/12**

IPC 8 full level
H01J 9/44 (2006.01); **H01J 7/16** (2006.01); **H01J 9/39** (2006.01); **H01J 29/04** (2006.01); **H01J 29/18** (2006.01); **H01J 29/94** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP US)
H01J 7/16 (2013.01 - EP US); **H01J 9/39** (2013.01 - EP US); **H01J 29/94** (2013.01 - EP US); **H01J 41/18** (2013.01 - EP US)

Citation (search report)
• [X] WO 9639582 A1 19961212 - COLOR PLANAR DISPLAYS INC [US]
• [A] FR 2709373 A1 19950303 - FUTABA DENSHI KOGYO KK [JP]
• [A] US 5578900 A 19961126 - PENG CHAO-CHI [TW], et al
• [A] US 5063323 A 19911105 - LONGO ROBERT T [US], et al

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
FR 2765392 A1 19981231; **FR 2765392 B1 20050826**; DE 69838467 D1 20071108; DE 69838467 T2 20080626; DE 69841931 D1 20101118; EP 0893817 A1 19990127; EP 0893817 B1 20070926; EP 1814136 A2 20070801; EP 1814136 A3 20070815; EP 1814136 B1 20101006; JP 4011742 B2 20071121; JP H1125889 A 19990129; US 6107745 A 20000822

DOCDB simple family (application)
FR 9708363 A 19970627; DE 69838467 T 19980626; DE 69841931 T 19980626; EP 07102656 A 19980626; EP 98410073 A 19980626; JP 19360298 A 19980625; US 10468398 A 19980625